CEUR Workshop Proceedings 2014 vol.1197, pages 86-90

Automatic defect recognition in corrosion logging using magnetic imaging defectoscopy data

Gaibadullina R., Zagidullin B., Bochkarev V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The Magnetic Imaging Defectoscopy is designed for detection of corrosion zones in oil wells. Location of corrosion zones is a time-consuming process, during which some defects can be missed. Therefore this process shall be automated. This document describes an algorithm of automatic defect recognition based on maximum likelihood criterion and the use of wavelet threshold processing for noise reduction and pre-conditioning of experimental data.

Keywords

Magnetic imaging defectoscopy (MID), Maximum likelihood criterion, Wavelet filtering